TEMGOT 38.4V105AH-M

TEMGOT 36V 105Ah Lithium Golf Cart Battery User Manual

Model: 38.4V105AH-M

1. Introduction

This manual provides essential information for the safe and efficient use of your TEMGOT 36V 105Ah Lithium Golf Cart Battery. Please read this manual thoroughly before installation and operation to ensure proper handling and to maximize battery performance and longevity.
The TEMGOT 36V 105Ah LiFePO4 battery is designed as a high-performance power source for golf carts, offering a long cycle life and stable power output. It features a built-in Smart 160A Battery Management System (BMS) for comprehensive protection.

2. Safety Information

Always observe the following safety precautions to prevent injury or damage to the battery and equipment:

- Do not short-circuit the battery terminals.
- Do not expose the battery to fire, excessive heat, or direct sunlight for prolonged periods.
- Do not immerse the battery in water or other liquids.
- Do not disassemble, crush, or puncture the battery.
- Use only the specified charger (42.6V 20A) for this battery.
- Ensure proper ventilation during charging and operation.
- Wear appropriate personal protective equipment (PPE) such as gloves and eye protection when handling the battery.
- Keep out of reach of children.

3. What's in the Box

Upon unpacking, verify that all components are present and undamaged:

- TEMGOT 38.4V 105Ah LiFePO4 Battery
- Product Manual (this document)
- Smart LCD Screen (for monitoring)
- M8 Terminals & Screws
- 42.6V 20A Dedicated Charger
- External switch and cable (for remote power control)

Figure 3.1: Package Contents. Includes the 38.4V 100Ah Battery, Product Manual, Smart LCD Screen, M8 Terminals & screws, and the 42.6V 20A Dedicated Charger.

4. Specifications

Feature	Specification
Model	38.4V105AH-M

Feature	Specification
Nominal Voltage	38.4 Volts (36V system compatible)
Battery Capacity	105 Amp Hours (Ah)
Energy	5.37 kWh
Battery Cell Composition	LiFePO4 (Lithium Iron Phosphate)
Built-in BMS	160A (Continuous Discharge Current)
Peak Discharge Current	315A for 30s, 600A for 3s
Cycle Life	5000+ cycles
Max Power Output	6.14 kW (8192W)
Recommended Charger	42.6V 20A Dedicated LiFePO4 Charger
Charging Time (approx.)	5-6 hours with 42.6V 20A charger
Item Weight	81.6 Pounds (approx. 37 kg)
Terminal Type	M8
Dimensions (L x W x H)	Approx. 16.5 in x 11.81 in x 9.29 in (41.9 cm x 30 cm x 23.6 cm)
Waterproof Rating	IP65

Figure 4.1: Battery Dimensions and Terminal Type. The battery measures approximately 16.5 inches in length, 11.81 inches in width, and 9.29 inches in height. It weighs 72.75 lbs and uses M8 terminals.

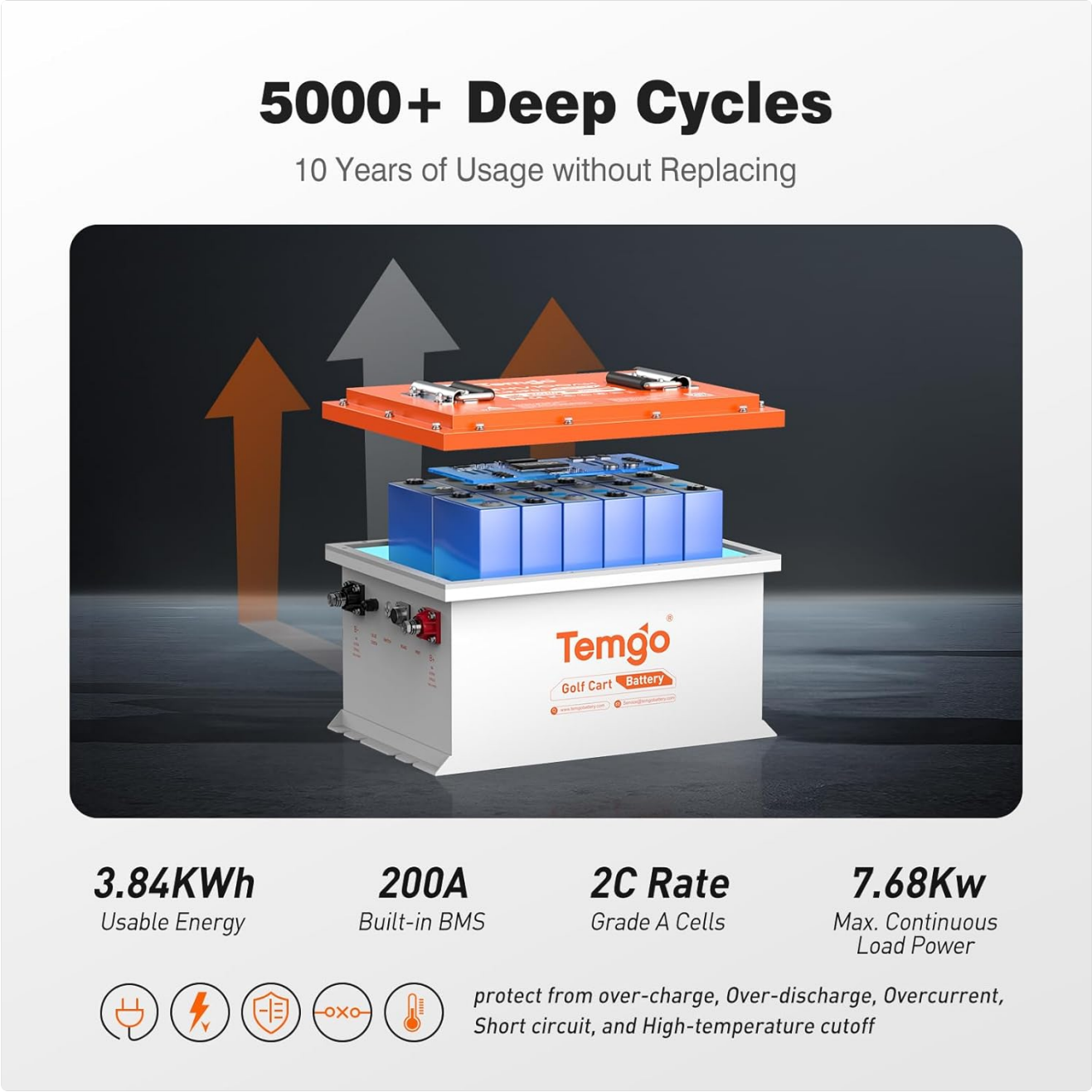

Figure 4.2: Internal Structure and Key Performance. Highlights 5000+ deep cycles, 3.84kWh usable energy, 200A built-in BMS, 2C rate Grade A cells, and 7.68kW max continuous load power. The BMS protects against over-charge, over-discharge, overcurrent, short circuit, and high-temperature cutoff.

5. Installation and Setup

5.1 Pre-Installation Checks

- Ensure the golf cart's power is completely off before beginning installation.
- Verify the battery dimensions against the available space in your golf cart's battery compartment. Some modification to the battery tray may be required for optimal fit.
- Confirm that your golf cart's electrical system is compatible with a 36V lithium battery.
- If your golf cart has 12-volt accessories (e.g., headlights), a 36V/48V to 12V converter will be necessary.

5.2 Battery Installation

1. **Remove Old Batteries:** Carefully disconnect and remove existing lead-acid batteries, noting the original wiring configuration.

2. **Position New Battery:** Place the TEMGOT lithium battery securely in the battery compartment. Ensure it is stable and does not shift during operation. The battery can be mounted in any position due to its sealed design.
3. **Connect Wiring:**
    - Connect the main negative wire (often from the motor) to the negative terminal of the TEMGOT battery.
    - Connect the main positive wire (often to the forward/reverse switch) to the positive terminal of the TEMGOT battery.
    - Use the provided M8 terminals and screws, ensuring all connections are tight and secure.
    - For older resistor carts, if the reverse cable was wired for 18 volts, you may need to run it directly to the positive terminal or jump it over the main positive cable to ensure full speed in reverse.
4. **Install External Switch (Optional):** The battery includes an external switch and cable. Install this switch in a convenient location, such as the dashboard, to easily turn the battery on/off without lifting the seat.
5. **Secure Battery:** While the metal case provides durability, ensure the battery is properly secured to prevent movement, especially on rough terrain.

5.3 Initial Charge

After installation, it is recommended to fully charge the battery before first use.

1. Connect the 42.6V 20A dedicated charger to the battery's charging port.
2. Plug the charger into a suitable AC power outlet.
3. Allow the battery to charge until the charger indicates a full charge (typically 5-6 hours). The battery's LCD screen or app will also show the charge status.

Figure 5.1: Dedicated 42.6V 20A Charger. This charger supports fast charging in 5-6 hours and includes protections against input voltage abnormalities, hardware over-voltage, and short circuits.

6. Operation

6.1 Turning the Battery On/Off

- **Main Battery Switch:** The battery features a main switch with a green indicator light. When the switch is turned on, the indicator light will be green, confirming the battery is active.
- **External Switch:** If installed, use the external switch to power the battery on or off remotely.

6.2 Monitoring Battery Status

The TEMGOT battery offers two methods for real-time monitoring of its status:

- **Smart LCD Screen:** The included 2.8-inch touch screen can be mounted in a convenient location to display battery information such as state of charge, voltage, current, and remaining time.
- **APP Monitoring:** Download the dedicated TEMGOT app to your smartphone. The app provides live

information, allowing you to monitor the battery status wirelessly.

Figure 6.1: Battery Status Monitoring. The battery status can be monitored through a smartphone application or the included Smart LCD Screen, displaying charge percentage, voltage, current, and estimated time to empty.

6.3 Driving Range

The 105Ah capacity provides an extended driving range. Expect approximately 30-41 miles on a full charge, depending on terrain, load, and driving style. The battery maintains consistent power output even as the charge level decreases.

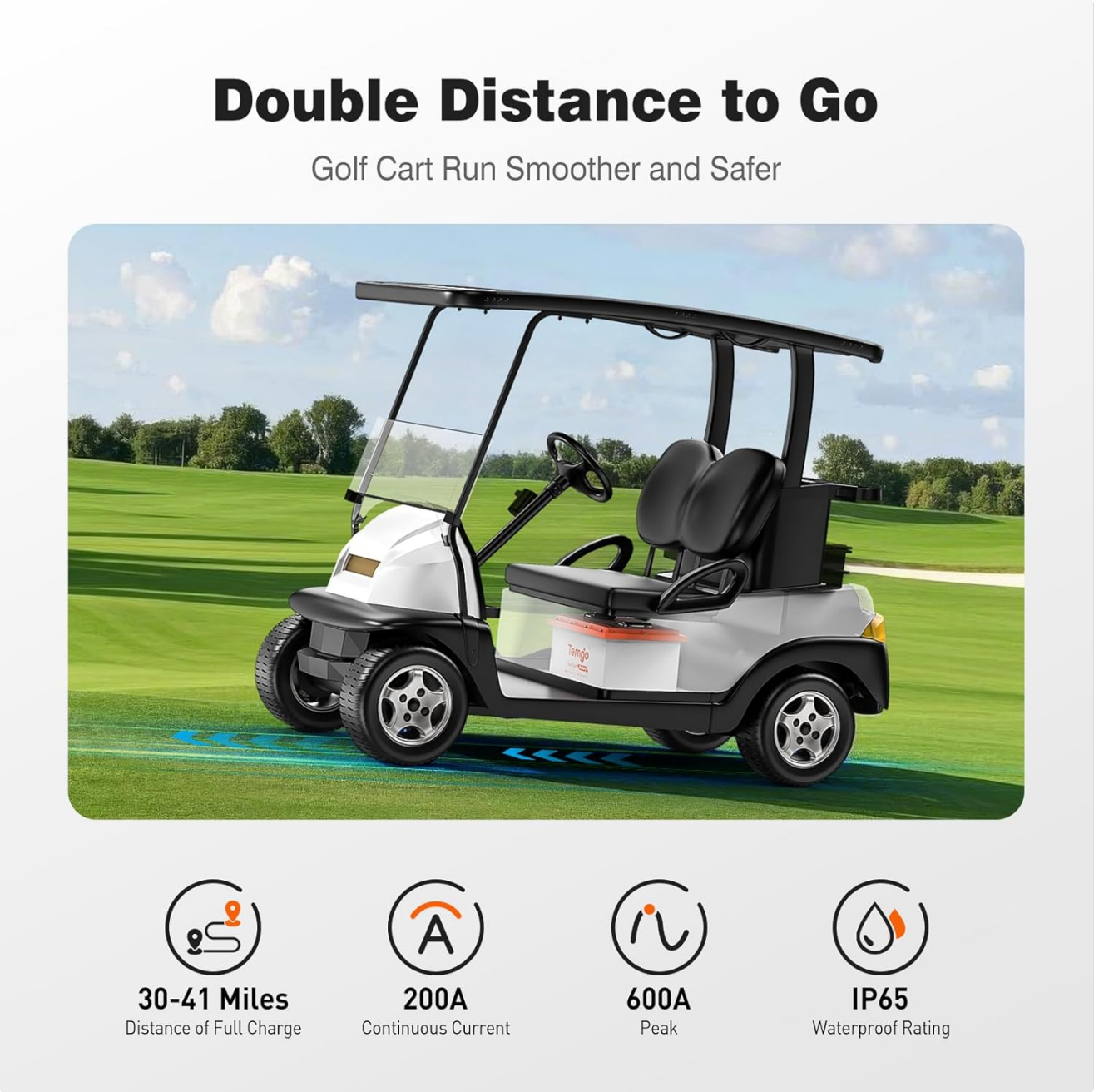

Figure 6.2: Extended Driving Range. The battery offers 30-41 miles distance per full charge, 200A continuous current, 600A peak current, and an IP65 waterproof rating, ensuring smooth and safe golf cart operation.

7. Charging

- Always use the provided 42.6V 20A dedicated LiFePO4 charger. Using an incompatible charger can damage the battery and void the warranty.
- Connect the charger to the battery's charging port first, then plug it into a standard AC outlet.
- The charger will automatically stop charging once the battery is full.
- Charging typically takes 5-6 hours from a fully discharged state.
- It is safe to leave the battery connected to the charger after it is fully charged, as the charger will enter float mode.

8. Maintenance

The TEMGOT LiFePO4 battery is designed to be maintenance-free, eliminating the need for regular watering or

terminal cleaning associated with lead-acid batteries. However, general care practices will ensure optimal performance and longevity:

- **Regular Inspection:** Periodically check battery terminals for cleanliness and tightness. Ensure there are no loose connections.
- **Cleaning:** If necessary, wipe the battery casing with a dry or slightly damp cloth. Do not use harsh chemicals or abrasive cleaners.
- **Storage:** If storing the battery for an extended period, ensure it is charged to approximately 50-70% capacity and stored in a cool, dry place away from direct sunlight and extreme temperatures.
- **BMS Protection:** The built-in 160A BMS provides comprehensive protection against over-charge, over-discharge, over-current, high/low temperatures, and short-circuiting, reducing the need for user intervention.

9. Troubleshooting

If you encounter issues with your TEMGOT battery, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Battery not turning on	Main switch off; External switch off; Deep discharge; BMS protection activated.	Ensure main battery switch and external switch are ON. Connect to charger to reactivate from deep discharge or BMS protection.
Battery not charging	Charger not connected properly; Faulty charger; BMS protection (over-voltage, low temperature).	Check all charger connections. Ensure charger is plugged into a live outlet. Verify charger is the correct 42.6V 20A model. Move battery to a warmer environment if ambient temperature is too low.
Reduced range or power	Battery not fully charged; High power draw; Extreme temperatures.	Ensure battery is fully charged before use. Reduce heavy loads if possible. Operate within recommended temperature ranges.
BMS shutdown during operation	Over-current; Over-discharge; High/low temperature.	Reduce load on the golf cart. Allow battery to cool down or warm up to operating temperature. Charge the battery if it's deeply discharged. The BMS will automatically reset once conditions return to normal.
LCD screen or app not displaying data	Loose connection; Battery off; App not connected via Bluetooth.	Check connections to the LCD screen. Ensure the battery is powered on. For app, ensure Bluetooth is enabled on your device and the app is correctly paired with the battery.

If the problem persists after attempting these solutions, please contact TEMGOT customer support.

10. Warranty and Support

10.1 Warranty Information

TEMGOT provides a **five-year warranty** for all its batteries. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.
The warranty does not cover damage caused by improper installation, misuse, abuse, unauthorized modifications, or natural disasters.

10.2 Customer Support

For any questions, technical assistance, or warranty claims, please contact TEMGOT customer support. We offer 24-hour friendly and professional customer support.
Please refer to the product packaging or the official TEMGOT website for the most current contact information.

11. Application Scenarios

The TEMGOT 36V 105Ah LiFePO4 battery is versatile and suitable for various applications beyond golf carts, including:

- Mobility Scooters
- ATVs (All-Terrain Vehicles)
- Neighborhood Electric Shuttle Buses
- Riding Mowers
- Marine applications
- RV, campers, travel trailers
- Off-grid applications

Figure 11.1: Diverse Applications. The battery is suitable for Mobility Scooters, ATVs, Golf Carts, Neighborhood Electric Shuttle Buses, and Riding Mowers.

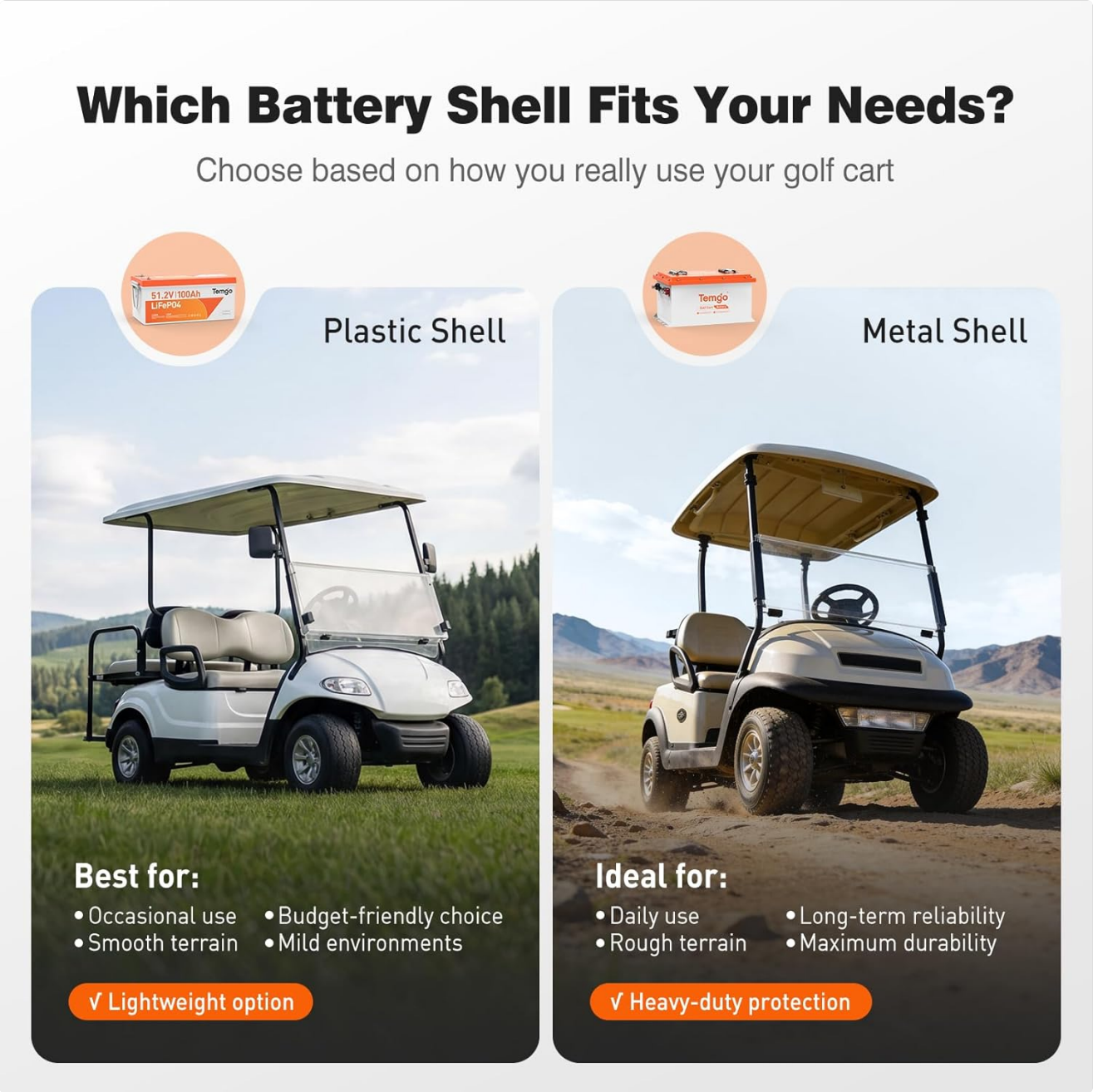

Figure 11.2: Battery Shell Options. This battery features a metal shell, ideal for daily use, rough terrain, long-term reliability, and maximum durability. Plastic shell options are available for occasional use, smooth terrain, mild environments, and as a lightweight, budget-friendly choice.